

# MATH

## Addition Magician

Math Software for Ages 6-10.

An amazing game that teaches younger children the basic concepts of addition. A captivating number strategy game for older children. Classroom tested. Another innovative program from The Learning Company.

The  
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Company





# Addition Magician<sup>TM</sup>

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## **ABOUT THE AUTHOR**

Dale Disharoon — teacher, programmer, classical guitarist, and puppeteer is the designer and programmer of Word Spinner. An award-winning educational software artist, Disharoon began designing software while teaching in a small country school on the California coast. A best selling computer book author, Disharoon co-authored his recent book with Herb Kohl and Ted Kahn. Disharoon's bachelor's degree is in Information and Communication Studies. He studied film, radio and television with an emphasis in children's programming, and continues to be involved in children's multi-media learning activities.

# Addition Magician

*Addition Magician runs on:*

- ☐ Apple II, 48K with Applesoft
- ☐ Apple II+, 48K
- ☐ Apple IIe

*or:*

- ☐ IBM PC, 128K
- ☐ IBM PCjr, 128K

*or:*

- ☐ Commodore 64

*With:*

- ☐ Disk Drive
- ☐ Monitor or TV

*For:*

- ☐ Ages 6-10



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Menlo Park, CA 94025  
Attn: Disk Return Dept.

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## WELCOME TO ADDITION MAGICIAN

Have you ever played number games with a magician? Now you can! The Addition Magician will help you master adding numbers. You will learn to add numbers in different ways. And you'll learn to see number patterns, too. It all adds up to lots of fun.

By playing the game, you'll discover that there are different ways to get the same answer. The Addition Magician knows all the answers. But you can be an Addition Magician, too. Count on the magician to show you how.

There are many ways to play Addition Magician. You can make games long or short, hard or easy. You can play them fast or slow, alone or with a friend. This guide tells you how.

P.S. Some people think that Addition Magician is just for fun. To see what you are learning, turn to THE LEARNING LIST on page 17.

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## GETTING STARTED

### IF YOU ARE USING AN APPLE COMPUTER OR AN IBM-PC\*

- Put your Addition Magician disk in the disk drive and close the door.
- Turn on the computer.
- If you are using an Apple IIe computer, be sure the **CAPS LOCK** key is pressed down.



### IF YOU ARE USING A COMMODORE 64 COMPUTER

- Turn on the disk drive. Wait until the red light goes out.
- Insert your Addition Magician disk into the disk drive. Close the door.
- Turn on the computer. The red light on the disk drive will go on while the disk loads.
- When you see the READY prompt on the screen, type:

**LOAD "LOADER",8**

- Press **RETURN** .
- When READY appears again on the screen, type:

**RUN**

\*If you are using an IBM PC, you must put DOS on your Addition Magician diskette before you use it the first time. See page 16 for instructions.

First you will see an opening picture. (If you want to skip the opening music, just press **SPACEBAR** .)

Then you will see the Menu. It lets you choose different ways to play the game.

Is this the first time you have played Addition Magician? If so, it is a good idea to go right to the Sample Game. To get to the Sample Game, press **2** .

In the Sample Game, you will learn how to:

- move a dot on the screen.
- draw walls around numbers.
- erase walls.

If you already know how to play, you can skip the next two sections. Go right to page 12 and read “The Menu — Choosing Your Options.”







NOTE: All photographs of program screens are of the Apple version.

## HOW TO MOVE

The flashing dot you see is the tip of the Addition Magician's wand. You can point his magic wand where you want by moving the flashing dot. Here's how:





### ON APPLE (Ile) AND IBM COMPUTERS:

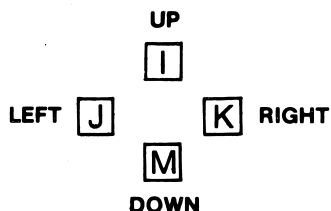
Use the arrow keys to move the flashing dot:

-  moves the dot up.
-  moves the dot left.
-  moves the dot right.
-  moves the dot down.

### ON APPLE II/II+ COMPUTERS:

These keys move the flashing dot:

-  moves the dot up.
-  moves the dot left.
-  moves the dot right.
-  moves the dot down.



### ON THE COMMODORE-64

Use a joystick lever: **For a one-player game, be sure the joystick is plugged into Port #2.**

- UP moves the dot up.
- LEFT moves the dot left.
- RIGHT moves the dot right.
- DOWN moves the dot down.



## DRAWING WALLS

To play the game, you need to draw walls around numbers. You do this by moving the flashing dot to where you want a wall (see illustration). Then:

- **on the Apple and IBM** — press SPACEBAR.
- **on the Commodore-64** — press the joystick BUTTON.

5	1	2
.		
3	3	4
1	2	3

5	1	2
3	3	4
1	2	3

The magician's magic wand flashes, and — zip! — your wall appears.

## ERASING WALLS

Do you want to take away a wall? Move the flashing dot to the center of a wall. Then:

- **on the Apple and IBM** — press SPACEBAR.
- **on the Commodore-64** — press the joystick BUTTON.

Presto! The wall is gone.

**Remember:** Press SPACEBAR or BUTTON one time to draw a wall. Press SPACEBAR or BUTTON again to erase the wall.

Use the Sample Game to practice moving the dot, drawing walls, and erasing walls. If you want to return to the Menu from the Sample Game:

- On IBM or Apple computers: Press ESC.
- On the Commodore-64: Press X.



## HOW TO PLAY

In Addition Magician, you play with numbers on a game board. You need to find numbers that add up to a certain target sum. The target sum is the number below the game board.



- First, find numbers that add up to the target sum and draw walls around them.
- Then, keep drawing walls until all the numbers are inside walls. The numbers inside each set of walls should add up to the target sum.
- Are all your walls in the right places? To find out:

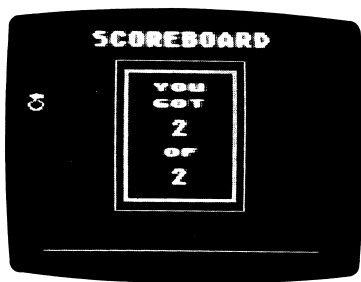


- on Apple computers: Press **RETURN**.
- on the IBM computer: Press **Enter** **←**.
- on the Commodore-64: Position the cursor on top of the center number. When it flashes, press **BUTTON**.

If all of your walls are not in the right places, don't worry. The Addition Magician will let you try again.

Each game can have two or more game boards. You decide how many. (See page 13.) What if you get a game board you don't want? Press **[S]** to skip that board.

What happens when all of your walls are in the right places on every game board in a game? You win a prize from the magician's Magic Board. Can you win four of the magician's prizes in a row? If you can, get ready to see his treasure chest. When you win eight of the magician's prizes, you can see the Addition Magician himself!



## THE MENU — CHOOSING YOUR OPTIONS

Now that you know how to play the game, you can choose different ways to play it. Your options are listed on the Menu. These options let you make the game the way you want it.

### HOW TO CHOOSE AN OPTION

It's easy! Each option has a number to its left. Type the number of the option you want.



### THE OPTIONS

#### 1. START

When you press **1**, the game will start. Look first at the menu.

Are all the options set the way you want them? If not, make your choices. Then press **1** to START.

Here's what will happen:

**One-Player Game:** You'll go right to the game board. Just begin playing.

**Two-Player Game:** After you press **1**, the Addition Magician will ask you for the name of each player. Type the names using the keyboard keys. If you make a mistake:

- **On the Apple:** Press **←** and type the right letter.
- **On an IBM:** Press **←--** and type the right letter.
- **On a Commodore-64:** Press **INST DEL** and type the right letter.

To tell the Addition Magician you're ready to play:

- **On an Apple or Commodore-64:** Press **RETURN**.
- **On an IBM PC:** Press **Enter** **↵**.

## 2. SAMPLE GAME

Choose this option to practice moving the dot, drawing walls, and erasing walls. Just press **[2]** to play the Sample Game.

## 3. SUM

The game is set to play using 6 as the target sum. If you want to change the target sum, press **[3]**. Stop at the sum you want.

By pressing **[3]** you can change the target sum to any number from 6 to 18. After 18, the word "ALL" appears. The Addition Magician will give you a different target sum for every game board. ALL keeps you on your toes!

## 4. TURNS

How many game boards would you like to play in a row? You can choose any number from 2 to 20 by pressing **[4]**. Keep pressing **[4]** and see what happens.

## 5. TIME

Do you want to play against the clock? You can play SLOW, MEDIUM, or FAST, or you can turn the clock OFF by pressing **[5]**. When you play against the clock, you will see it above your game board, ticking seconds away. In the beginning, try OFF or SLOW. The Addition Magician is in no hurry.

## 6. PLAYERS

If you are playing with a friend, press **[6]**. This changes the game from 1 to 2 players. (See page 15 for details about the two-player game.)

## **OPTIONS ON SOME MACHINES**

### **SOUND**

The Addition Magician can play tunes or be quiet. Turn the sound ON or OFF by pressing the number next to it.

### **KEYBOARD**

Press the number next to this option to select keyboard or joystick for one player game.

## **ON ALL MACHINES**

### **? HELP PAGE**

If you press  you will see instructions on how to play the game. You can press it anytime while playing the game or select it from the menu.

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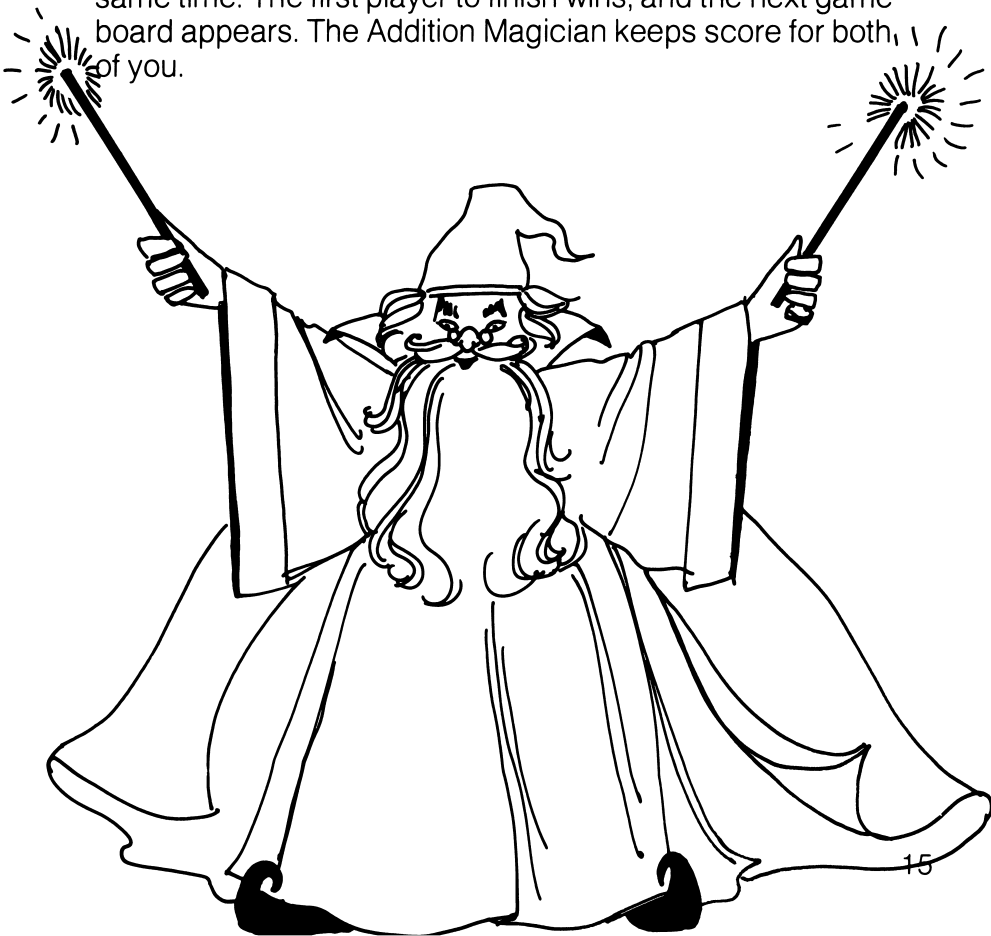
## PLAYING THE TWO-PLAYER GAME

You can make the Addition Magician work double-time when you play with a friend.

- **With Apple and IBM:** One player uses the keyboard to play, the other uses a joystick.
- **With Commodore-64:** Both players use joysticks.

The two-player game can be twice as much fun as playing alone. The game is like a one-player game except:

- There is no clock ticking away. You do not need to be faster than the clock to win. You just need to be a little faster than your friend!
- There are two different game boards — one for each player. You and your friend can play on your own game boards at the same time. The first player to finish wins, and the next game board appears. The Addition Magician keeps score for both of you.



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## BEFORE USING YOUR IBM ADDITION MAGICIAN DISKETTE

You need to add DOS to your IBM Addition Magician diskette before you use it for the first time. Here's how:

### IF YOU HAVE TWO DISK DRIVES

1. Put your DOS diskette into Drive A. Turn on the computer.
2. Put your Addition Magician diskette in Drive B.
3. When you see **A>** on the screen, type: **B:INSTALL**
4. Press Enter.
5. When you see **A>** again, your Addition Magician diskette is ready to use.

### IF YOU HAVE ONE DISK DRIVE

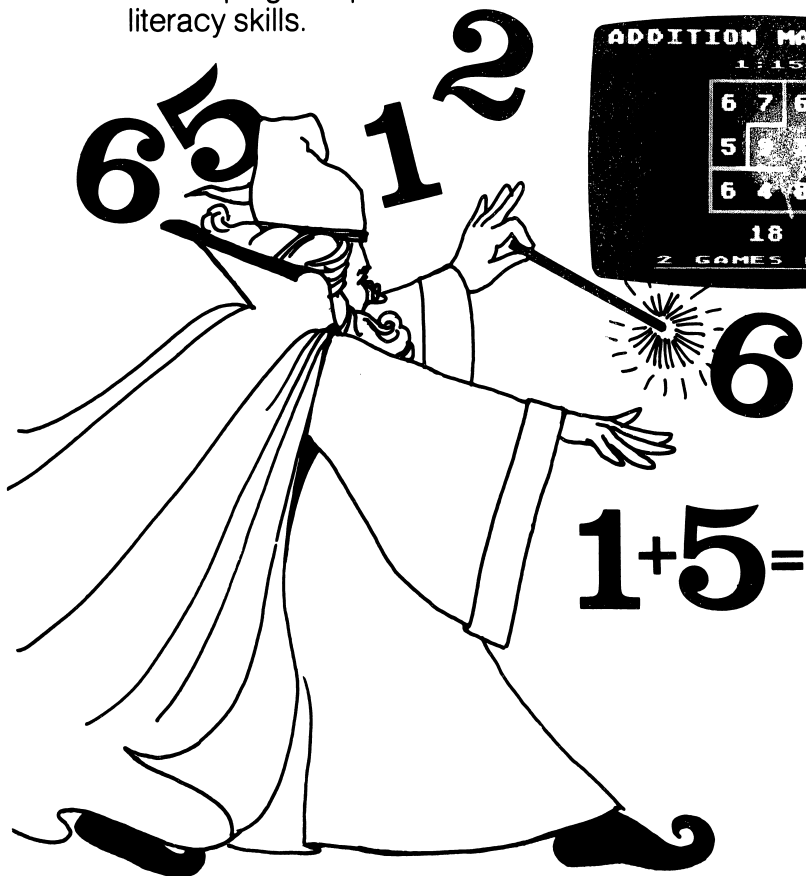
1. Put your DOS diskette into Drive A. Turn on the computer.
2. Type: **B:INSTALL**
3. When you see "Insert disk in Drive B," remove your DOS diskette from Drive A. Then put your Addition Magician diskette into Drive A.
4. When you see "Insert disk in Drive A," remove your Addition Magician diskette from Drive A. Then put your DOS diskette back into Drive A.
5. Repeat steps 3 and 4 until you see **A>** on the screen. When you see **A>**, your Addition Magician diskette — is ready to use.

## THE LEARNING LIST

Addition Magician gives children an opportunity to learn math skills at their own pace and at their own ability level. The flexibility of the program provides challenging games for children just learning to add, as well as for children who have mastered addition skills.

### SKILLS AND CONCEPTS

- Working with sums from 6 to 18.
- Using number patterns.
- Learning to think flexibly about numbers.
- Developing computer literacy skills.





## ADDITIONAL ACTIVITIES

### TIC-TAC-NUMBER

Tic-Tac-Number is a game you can play with a friend. Both of you need a piece of paper and a pencil or crayon.

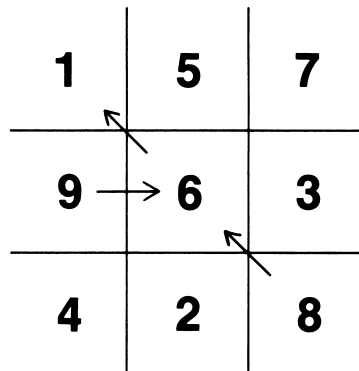
First, draw a tic-tac-toe pattern on your paper. Then write the numbers from 1 to 9 inside the walls in any order. Have your friend do the same thing. Your friend's numbers should be in different places than yours. Now trade tic-tac-number patterns.

Draw lines between two or more neighboring numbers that add up to 15. Neighboring numbers can be:

- ☐ next to each other.
- ☐ above or below one another.
- ☐ diagonal from each other.

Use arrows to point the way, as shown here. You may use a number more than once.

1	5	7
9	6	3
4	2	8



Who can find the most number combinations that add up to 15? That player has *almost* won.

Now trade papers and check each other's tic-tac-number pattern. Were any number combinations missed? If the player who found the most number combinations missed one, the other player still wins.

You can make the game harder by using numbers from 2 to 10, 3 to 11, or 4 to 12. Try it!

## NUMBERGRAM

This puzzle is just for fun.

Make a copy of the numbergram below or draw one like it on a piece of paper.

These numbers need to go in the boxes in a special way:

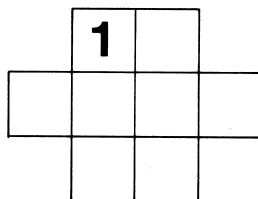
1 2 3 4 5 6 7 8

Here are the rules:

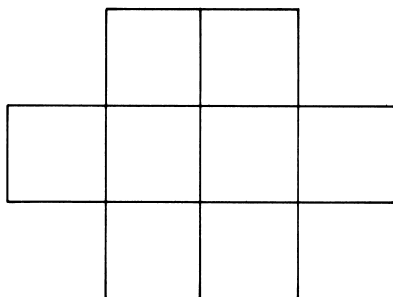
No two numbers that follow each other (like 1 and 2, or 6 and 7) can go in the boxes:

- beside each other.
- above or below each other.
- diagonal from each other.

Let's say you put number 1 in the box shown here. There are only three boxes where number 2 can go. These three boxes do not touch number 1's box.

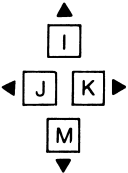


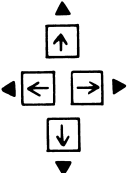





If you need help, read the hint below.



HINT: Put 5 and 3 in the top two boxes.

# SPECIAL KEYS

KEYS			FUNCTION
Apple	IBM	Commodore 64	
 or  on IIe SPACEBAR ESC RETURN RETURN ?  S	 SPACEBAR ESC Enter  Enter  ?  S	UP LEFT joystick lever RIGHT DOWN joystick button X joystick button RETURN ? INST DEL S	To move dot up, down, left, right.  Press once to draw a wall; press again to erase a wall. To return to Menu. To enter a game board solution. In two-player game, to enter typed names. To get how-to-play help. To erase a mistake when typing in names. To skip a game board.

$$1+5=6$$
$$5+1=6$$

$$4+2=6$$
$$2+4=6$$
$$3+3=6$$



---

## MORE FROM THE LEARNING COMPANY

### READING

**JUGGLES' RAINBOW** Children develop reading and math readiness skills by playing with dancing rainbows, butterflies and windmills. Ages 3-6.

**READER RABBIT AND THE FABULOUS WORD FACTORY** A playful, mischievous character in a bustling factory will inspire children to develop pre-reading and early reading skills almost overnight. Ages 5-7.

**WORD SPINNER** Reading becomes like a ride in an amusement park as children spin through the alphabet and learn the building blocks of reading — making three- and four-letter words. Ages 6-10.

**MAGIC SPELLS** Children sharpen spelling skills through an adventure world of castles, demons and wizards. Ages 6-10.

### MATH

**BUMBLE GAMES** With Bumble, a friendly creature from the planet Furrin, children learn fundamental math skills and create computer graphics. Ages 4-10.

**BUMBLE PLOT** Children learn advanced math skills and create computer graphics by plotting positive and negative numbers. Ages 8-13.

**NUMBER STUMPER** In the electronic version of a classic 14th century game of chance, children learn to add and subtract and also develop abstract reasoning and strategic thinking skills. Ages 6-10.

### LOGIC AND PROBLEM SOLVING

**GERTRUDE'S SECRETS** While solving playful puzzles with Gertrude, the go-getter goose, children develop logical thinking skills. Ages 4-10.

**GERTRUDE'S PUZZLES** Children develop abstract thinking skills by solving complex logic puzzles in Gertrude's animated world. Ages 8-13.

**MOPTOWN PARADE** Children learn thinking and problem-solving skills by strategically arranging colorful Moppet characters. Ages 6-10.

**MOPTOWN HOTEL** In the fantasy world of Moptown, children learn to hypothesize and develop strategic thinking skills. Ages 9 and up.

**ROCKY'S BOOTS** Learn the basics of computer logic and circuitry by designing machines using simulated logic elements. Play 39 games or create your own. Ages 5-7.

### ART

**COLORASAURUS** A brand new type of coloring book for young artists — children learn about colors, hues and matching. Ages 3-6.

TLC programs are available for major personal and home computers. Check with your dealer for product availability.

## Addition Magician

■ Your child will learn to add in no time!

■ Then the real magic starts —discovering how to think flexibly about numbers, learning how different numbers make the same sum.

■ And it's all done in a game—with magic walls, race-against-the clock.



"It's hard not to marvel at the potential power of [TLC] to change—profoundly and permanently—the face of American education."

*Softalk*